

I. V. Korchagina

Kemerovo State University (Kemerovo, Russian Federation; korchagina-i@mail.ru)

INNOVATIVE POTENTIAL IN THE SMALL AND MEDIUM-SIZED ENTERPRISES REGIONAL CLUSTERS IN RUSSIA

Accelerated development of small and medium-sized enterprises is necessary for dynamic regional growth. The fastest growth of small and medium-sized enterprises takes place in clusters. However, clusters of small and medium-sized enterprises are usually engaged in the simplest activities, do not implement innovations. The purpose of the article is to identify and evaluate the innovative potential of existing clusters of small and medium-sized enterprises in the regions of Russia.

A research method is the comparative analysis, trend and index analysis, case-method, methods of statistical information processing. The study found a low level of innovation activity in clusters of small and medium-sized enterprises. Their impact on the qualitative development of the regional economy is severely limited. The main reason is weak internal innovation potential and lack of integration with innovation generators. Technological entrepreneurship is developing poorly. The size of the cluster of small and medium-sized enterprises is insufficient to form the infrastructure and elements of the innovation system.

Innovative institutions can be formally included in the cluster, but there is no real interaction. Consequently, existing clusters of small and medium-sized enterprises solve only a limited number of specific tasks. Objective advantages of the cluster (positive effects of territorial concentration, diffusion of innovations, collective interactions) need to be complemented by elements of a regional innovation system. The development of the innovative potential of clusters of small and medium-sized enterprises requires interaction with the research and development sector, development institutions, the state, and public organizations. In addition, specific support is required for innovative activity of clusters of small and medium-sized enterprises. Under these conditions, clusters of small and medium-sized enterprises can positively affect the quality of economic growth in the territories.

Keywords: regional cluster, cluster of small and medium-sized enterprises, entrepreneurship, technological development, cluster policy, innovation, innovation potential.

Introduction

The development of small and medium-sized businesses, innovation and technological transformation of the economy, the formation of modern models of spatial organization of the economy are key areas of modern regional development. A powerful tool for regional and municipal development is the creation of clusters that take advantage of spatial concentration and other positive effects. Clusters are a recognized popular development tool. Many territories in Russia and abroad have policies and programs to stimulate clusters. However, the simple creation of clusters by administrative methods does not give the expected result. It is necessary to identify and support initiatives that already have cluster potential. This circumstance substantially complicates the cluster policy.

The cluster approach has a significant impact on the development of small and medium-sized businesses. At present, some of the clusters of different regions of Russia are clusters of small and medium-sized enterprises. In a cluster, small and medium-sized enterprises have the following advantages: the use of common labor markets, equipment, labor; the creation of collective institutions and infrastructure elements; saving costs due to the effect of spatial concentration; expansion of opportunities to protect their interests. The cluster qualitatively strengthens small and medium-sized business, allows rationalizing its state support (to stimulate not isolated small enterprises, but the value chain that produces the finished

product). The main result of the development of clusters of small and medium-sized enterprises is the organization of production of finished competitive products. This is especially important for raw material regions, monoprofile municipality [1, 2].

Nevertheless, modern clusters of small and medium-sized enterprises have significant limitations in their capabilities. The main among them is extremely limited innovation (innovative and technological) potential. The low level of innovative activity of the cluster of small and medium-sized enterprises determines the choice of traditional types of economic activity (production of consumer products, provision of services, construction). Thus, clusters of small and medium-sized enterprises are not innovative, have the potential for economic growth, but do not lead to qualitative development. The main problem of clusters of small and medium-sized enterprises is limited innovation capacity

Consequently, there arises a scientific and practical problem - the contradiction between the request for an innovation-technological transformation of the economy and the limited nature of its innovative potential of clusters of small and medium-sized enterprises. This problem can make small and medium-sized businesses an outsider of the national economy. Solving this problem requires a study of the existing innovation potential of clusters of small and medium-sized enterprises. In turn, this will help to identify the factors that contribute to the growth of innovative capacity and to develop mechanisms, measures, and methods for regulating clusters of small and medium-sized enterprises within the framework of regulating the regional economy.

Theoretical Basis

Clusters of small and medium-sized enterprises are studied in developed and developing countries. Among the most famous studies can be identified World Bank publications on the clustering of small and medium-sized businesses in Africa [3]. They identify existing clusters of small and medium-sized enterprises in Cameroon, Ghana, Kenya, Rwanda and Mauritania. They function both in traditional types of economic activity (metalworking, production of textile products, clothing, accessories) and in innovative ones. In particular, there are clusters of information technology in Mauritania and Rwanda («Ebena Cyber Tower», «ICT Park»). Along with this, two agricultural clusters are found: the cultivation of pineapples in Ghana and coffee in Rwanda. In Rwanda, there is a tourist cluster («Gorilla Park»).

The productivity of such clusters is higher than the national economy as a whole. Cluster members are better provided with capital and equipment than isolated enterprises that do not participate in clustered associations. At the same time, a cluster member creates more jobs than a typical medium or small enterprise. The bulk of clusters of small and medium-sized enterprises in Africa are not limited to local markets. They enter the national, interregional or world market [3]. At the same time, traditional clusters formed largely spontaneously, clusters of information technologies are based on special institutional projects of governments. These clusters are organized relatively recently, in the early 2000s.

The materials of this study show that traditional clusters based on competitive advantages of low order (cheap labor, natural resources, agrarian resources) reveal high economic efficiency and competitiveness. The most successful are those clusters of small and medium-sized enterprises that produce consumer goods with stable demand, or export those resources that reflect the role of African states in the international division of labor. In other words, not cluster policy increased the efficiency of small and medium-sized businesses, and the most successful enterprises formed an export-type cluster. The innovative clusters of Mauritania and Rwanda have not yet received the expected development. Thus, attempts to create an innovative cluster by administrative methods in these states were not justified.

For Indonesia, such activities are typical for clusters of small and medium-sized enterprises, such as knitting and sewing industry, metalworking and repair of metal structures [4]. In part, these clusters are entering the world market. At the same time, clusters of small and medium-sized enterprises are often located in rural areas, actively use cheap local labor, play a significant role in providing employment and income. Their main product is wood products (furniture, household goods). They focus on local residents with low incomes. For clusters of small and medium-sized enterprises in Indonesia is characterized by a low level of financial provision, large amounts of manual labor, primitive technology.

Clusters of small and medium-sized enterprises in Indonesia with traditional activities also developed spontaneously. In turn, state support for clusters using tools such as subsidies, creation of special economic zones, advisory support, creation of cooperatives, export facilitation, showed extremely limited effectiveness [5]. Despite all government efforts, clusters of small and medium-sized enterprises remained immune to innovation and retained traditional obsolete technologies.

It is assumed that a small or medium enterprise in a cluster should become an innovator, closely interacting with academic science, the consumer and participating in cooperation with in clusters [6]. In this case, a number of advantages are realized: the opportunity to learn from the experience of their partners, improve competence, both in the technical sphere and in the field of management. Also within the framework of such interaction, the diffusion of innovations is greatly accelerated. However, such an «ideal» development model is rarely implemented in practice. The innovation potential of the cluster of small and medium-sized enterprises remains largely limited. In particular, the practice of stimulating the innovation and technological activity of a number of clusters of small and medium-sized enterprises in Nigeria, located in large cities, gave only a temporary dampening effect [7].

Thus, significant government efforts did not lead to a «technological push», did not contribute to the development and use of the innovative potential of clusters of small and medium-sized enterprises. These literary data confirm the need for further research on the innovative potential of clusters of small and medium-sized enterprises in order to determine the possibilities of its growth and use.

In the understanding of innovation potential and approaches to its assessment, there are significant differences. The term «innovative potential» is applied to objects of different levels – countries, territories, organizations, personnel, etc. In its most general form, innovation potential is associated with the capabilities and capabilities to generate and implement innovations. On the one hand, innovation potential is a combination of opportunities for the production and introduction of innovations (scientific, technical, technological, financial, personnel, legal, infrastructure, etc.) [8]. Then the main scientific task is to determine the influence of different possibilities on the ability to innovate and evaluate them accordingly. A score or other evaluation of each component is possible, followed by an integral generalizing indicator.

On the other hand, innovation potential is considered as a set of resources that can be used to create innovations (scientific, technical, educational, investment) [9]. The choice of this or that approach to understanding the innovative potential causes differences in the methods of evaluation. Also, innovative potential can be understood as a level of preparedness for solving innovative problems [10]. Therefore, in order to assess the innovative potential of the cluster of small and medium-sized enterprises, it is necessary to adapt existing approaches and tools.

Method and Data

The article deals with officially recognized institutional clusters of small and medium-sized enterprises of the Russian Federation from the number of clusters of the Russian Federation taken into account. Currently, specialists of the Russian cluster observatory of the National Research University – Higher School of Economics support a map and register of clusters available at <https://map.cluster.hse.ru/list>. In the allocation of clusters of small and medium-sized enterprises, the results of [11] were used among the whole cluster of clusters, where to this class – of clusters are:

- A cluster of wooden housing and woodworking in the Vologda region,
- IT cluster of the Penza region,
- Agro biotechnological industrial cluster of the Omsk region,
- Agro-industrial cluster of the Novgorod region,
- Wine territorial cluster «Don Valley» of the Rostov Region,
- A cluster of water supply and sanitation in St. Petersburg,
- A cluster of information technologies of the Novgorod region,
- A cluster of manufacturers of furniture, woodworking and allied industries of the Republic of Sakha,
- Industrial cluster of Pestovo municipal district of the Novgorod region

- Textile cluster of the Ryazan region,
- Tourist and recreational cluster «Northern Mosaic» of the Republic of Sakha.

The research materials used in the register of Russian clusters were used as research materials, in particular, cluster development programs, program performance reports, constituent and program documents of clusters, presentation and other materials. It should be noted that different clusters provide an unequal amount of information about themselves to the public. This limits the possibilities of a comparative analysis of the innovation potential of different clusters. Nevertheless, a number of indicators and data on innovation potential have already been formed.

As the research methods, comparative analysis, trend and index analysis, case-method, methods of statistical information processing are applied. As for the methodology it and the procedure for evaluating the innovation potential of these clusters, the authors of the results of a number of studies on the indicators used have been summarized [12, 13, 14, and 15]. This allowed us to propose the following set of them:

- institutional components of the innovation potential of the cluster of small and medium-sized enterprises – presence/absence, maturity of specialized development institutions, joint projects, information communication practices, forming partnerships;
- quantitative indicators of innovation potential – the presence/absence of innovative products, the availability and specific gravity of high-performance jobs, the number of new (advanced) technologies introduced, the number of research and development, the professional training of personnel, the creation of intellectual property and intangible assets for the needs of a small cluster and medium-sized enterprises.

It should be taken into account that the volume of information on different clusters is not the same; therefore some indicators cannot be calculated for individual clusters. Nevertheless, it seems that the estimates obtained will be of interest both for research and for applied purposes.

Results

The institutional foundations of the innovation potential of the cluster of small and medium-sized enterprises are related to such variables as the availability of a single information and communication infrastructure, a system for facilitating competencies (training and retraining of staff), the availability of partnerships, and the implementation of joint projects and programs. Information on the institutional components of the innovative potential of the clusters under consideration is presented in Table 1.

Table 1.

Institutional components of the innovative potential of clusters of small and medium-sized enterprises in the Russian Federation¹

Cluster name	Main institutional components of innovation potential	Note
1. Cluster of wooden house-building and woodworking in the Vologda region	Specialized organization of cluster development with services of organizational development, strengthening of cooperation ties, development of innovative potential, development of human resources, formation of a common brand, development of relations with authorities. The projects of transport and logistics center, techno park are realized, an exhibition platform is created. Educational activities are conducted, communication activities are conducted	The highest level of institutional components of innovation capacity
2. IT cluster of the Penza region	The management subject is a resource center for supporting cluster initiatives. Offers the same services. There are professional events, information campaigns	Average level of development

¹ Compiled according to the Russian Cluster Register. URL: <https://map.cluster.hse.ru/>.

Cluster name	Main institutional components of innovation potential	Note
3. Agro biotechnological industrial cluster of Omsk region	The management company Omsk Bio Cluster was formed. Offers the same services. There are no realized projects	Average level of development
4. Agro-industrial cluster of the Novgorod Region	There is no governing subject; there is a coordinator (Novgorod Fund for Support of Small Business)	Insufficient level of development
5. Wine Territorial Cluster «Don Valley» of the Rostov Region	There is no administrative subject; there is a coordinator (the United Regional Center for Innovative Development of the Rostov Region). There are no services or projects. There is a self-regulating organization of wine growers. It is planned to create (support) adjacent start-ups and sub clusters	Insufficient level of development
6. Cluster of water supply and sanitation in St. Petersburg	The management company – ANO «Managing Company of the Cluster of Water Supply and Sanitation in St. Petersburg» was formed. It is planned to create a technological segment, in particular, a techno park	Insufficient level of development
7. The cluster of information technologies of the Novgorod region	There is no governing subject; there is a coordinator (Novgorod Fund for Support of Small Business). We offer services for organizational development, strengthening of cooperation ties, and development of innovative potential, development of human resources, formation of a common brand, and development of ties with authorities. Implemented projects are unknown	Average level of development
8. Cluster of manufacturers of furniture, woodworking and allied industries of the Republic of Sakha (Yakutia)	The management subject is JSC Cluster Development Center «Yakutia». Offers the same services. It is planned to create a business center, a common logistics-warehouse function	Average level of development
9. Industrial cluster of Pestovo municipal district of the Novgorod region	There is no governing subject; there is a coordinator (Novgorod Fund for Support of Small Business). Offers the same services. The projects are not known	Insufficient level of development
10. Textile cluster of the Ryazan region	Manages JSC Corporation for the Development of the Ryazan Region. It is proposed to form a single cluster on the former industrial site of the weaving factory. Other projects and activities are unknown	Insufficient level of development
11. Tourist and recreational cluster «Northern Mosaic» of the Republic of Sakha (Yakutia)	The management body is JSC Cluster Development Center «Yakutia». Offers the same services. Specific projects are unknown	Average level of development

The data in Table 1 make it possible to comprehend the level of development of the institutional component of the innovation potential of clusters of small and medium-sized enterprises in Russia. The most common institutional components are:

- A specialized organization for the management of clusters;
- specialized services aimed at cluster development, in particular, integration, access to infrastructure, development of human resources, brand, etc.;
- Realization of special projects on institutional development (creation of objects of collective use - techno parks, logistics distribution centers, etc.);
- Info communication support, holding specialized, professional events.

Depending on the availability of these components, one can judge the level of development of the institutional component of the innovation potential of the cluster of small and medium-sized enterprises (Table 1).

According to the presented data, the cluster of wooden house-building and woodworking of the Vologda region has the most developed institutional subsystem. In a number of clusters, the institutional foundations of the innovation potential are not sufficiently developed.

So, in a number of regions there are no specialized institutions for cluster management, services for cluster members are not implemented, nothing is known about infrastructure development projects. Consequently, one can note the absence of a unified model for managing the innovation potential of clusters of small and medium-sized enterprises in Russia. Here a lot depends on the opportunities and preferences of the region. Such a variety of approaches can lead to different levels of development of clusters.

In certain aspects, there are also unified approaches. In particular, in all regions, the structures that manage a cluster of small and medium-sized enterprises are defined. They can be specialized, or a broad profile (development corporations, technology parks, etc.). In this case, the structural subdivisions – departments or centers of cluster development are allocated. Among the most popular joint projects – the development of transport and logistics infrastructure, its own technology parks or business centers. Often the set of services for the cluster development organization is also unified. They promote the cooperation of participants, provide a platform for dialogue, organize cluster development, and can facilitate communication of participants with stakeholders. Practically in each cluster, integration with educational and scientific organizations of the territory of presence is declared.

Institutional bases create only prerequisites for the development and implementation of innovative capacity. They do not guarantee anything by themselves. Therefore, further consider the quantitative indicators of the innovation potential of a number of clusters of small and medium-sized enterprises in Russia. In particular, the published indicators of the cluster of wooden housing construction and woodworking in the Vologda region are presented in Table 2.

Table 2.

Quantitative indicators of the innovative potential of the cluster of wooden housing and woodworking in the Vologda region²

Indicator name	2016	2017	2018	2019	2020
Share of high-performance jobs in the total number of workplaces of cluster members, percent	55	55	55	60	60
Number of educational programs implemented for the benefit of cluster development	1	1	1	1	1
Number of trainees in the programs of training and professional development, people.	100	150	200	250	300
Number of seminars, conferences and other events held, units	7	10	12	12	12
The share of the cluster participants, which carry out the turnover of raw materials and finished products through a common transport and logical center	0	0	20	40	60
Number of studies and certifications, units	10	18	72	96	134
Number of mobile plants, units	0	1	3	5	7
Number of software products, units	1	2	2	2	2

The data in Table 2 show that the innovative development of the cluster is considered primarily from the point of view of creating new jobs that are characterized by high labor productivity. It is not a question of mastering the production of innovative (high-tech) products, since practically all the products of the construction complex are traditional. Among the indicators of innovation activity, we can also include the number of studies and certifications, the number of developed software products. The presented set of indicators and their dynamics make it possible to assert that the cluster under consideration is oriented to

² Compiled according to: The program of an industrial cluster of wooden housing and woodworking in the Vologda region. URL: https://map.cluster.hse.ru/file/1091/Программа_минпромтор%201.6.6.pdf.

the production of traditional products with the use of new technologies and own developments.

This profile of the innovation potential is not fully balanced, but it is in line with the cluster's industry. Successful implementation of the Program of industrial cluster of wooden housing and woodworking in the Vologda region will increase the gross regional product, increase the economic efficiency of the industry, the quality of life of people, including labor, but will not lead to serious innovation and technological shifts. This confirms the thesis about the objective limited innovation capacity of clusters of small and medium-sized enterprises in traditional types of economic activity.

It should be noted that the indicators used by clusters of small and medium-sized enterprises related to the innovative potential reflect not only the targets, but also the approach to management. The use of certain indicators significantly affects the cluster management system. As an example, we can refer to the system of indicators of a cluster of manufacturers of furniture, woodworking and related industries of the Republic of Sakha (Yakutia), which also assumes a completely traditional type of economic activity (Table 3).

Table 3.

Quantitative indicators of the innovation potential of the cluster of manufacturers of furniture, woodworking and allied industries of the Republic of Sakha (Yakutia)³

Indicator name	2016	2017	2018	2019	2020
The number of small and medium-sized enterprises combined into a common value chain, units	65	72	75	80	83
Number of high-performance jobs, people	439	456	475	494	513

The data in Table 3 show that the approach to assessing the innovation component of the cluster is greatly simplified. In fact, the cluster of furniture, woodworking and allied industries in the Republic of Sakha (Yakutia) is proposed to be evaluated according to a limited range of indicators. Among them, the innovative potential reflects the indicator of the number of participants in the value chain, as well as the number of high-performance jobs. There is no question of using innovations or their own development of speech here. A similar approach is seen in the documents of strategic planning for the majority of clusters of small and medium-sized enterprises engaged in traditional economic activities. Thus, the innovation potential is not only limited, but also there are no serious tasks for its development.

Let us compare the individual elements of the innovative potential of clusters of small and medium-sized enterprises with traditional and innovative types of economic activity. In this respect, the indicators provided by the strategy for the development of the information technology cluster of the Novgorod region (table 4) represent the interests.

From the data in Table 4, it can be seen that the Strategy for the Development of the Information Technologies Cluster of the Novgorod Region in terms of innovative potential in many respects reproduces the approaches typical for clusters with traditional economic activities. As one of the main indicators, the total number of high-performance jobs is presented.

³ Compiled according to: The cluster development strategy for furniture, woodworking and allied industries in the Republic of Sakha (Yakutia). URL: <http://ckryakutia.ru/klastery/mebelnyj-klaster/>

Table 4.

Quantitative indicators of innovation potential of the information technology cluster of the Novgorod Region⁴

Indicator name	2016	2017	2018	2019	2020
The total number of high-performance jobs for cluster members, people	34	72	130	200	250
Number of joint projects of enterprises participating in the cluster, units	5	8	12	12	15
Number of graduates of Novgorod State University in IT-directions, people	80	120	150	150	200
The volume of finished products sold by the cluster participants, millions rub.	-	823	-	-	2160

The second key indicator is the volume of sales of cluster products. In this case, almost all products are innovative, high-tech, therefore, reflects the degree of implementation of innovation potential. The number of joint projects and the number of graduates in the core areas can be attributed to the characteristics of the possibility of innovative cluster growth. However, they are not exhaustive characteristics of the innovation potential. A similar approach to the assessment and planning of innovation potential is also used in the IT cluster of the Penza region.

Discussion and Implications

The analysis of the innovative potential of clusters of small and medium-sized enterprises in Russia has certain limitations on the available information. Most of these clusters were created in 2014-2016, so the time series of data for analysis are severely limited. The comparative study of clusters is also hampered by the lack of uniform standards for the provision and disclosure of information. Nevertheless, according to the results of the study, it can be noted that the innovation potential of clusters of small and medium-sized enterprises in Russia is severely limited, and the documents of strategic planning practically do not touch upon the issue of its development.

Even the most common indicator – the number of high-productivity jobs, in its absolute magnitude in the regional scale is insignificant and speaks of the weak influence of the cluster of small and medium-sized enterprises on regional development. Even less impressive are the parameters of innovation potential, such as the release of new innovative products, research and development. Consequently, empirical studies support the empirical generalizations on the low innovative potential of clusters of small and medium-sized enterprises, formulated on the basis of other countries' materials. This narrows down their economic role and the range of strategic tasks to be accomplished.

It should be emphasized that the limited innovative potential is not a basis for refusing to develop clusters of small and medium-sized enterprises and pursuing the corresponding cluster policy. The potential of such clusters can play a significant role in diversifying the territory's economy, productive use of local resources, substitution of imported or foreign products, completion of value chains, increasing economic stability of territories, and solving the problem of employment and social tension. The given possibilities of clusters of small and medium-sized enterprises fully correspond to the key directions of strategic development of many regions and municipal entities of the Russian Federation [16, 17, and 18].

The development of the innovative potential of clusters of small and medium-sized enterprises is possible in principle, but requires new, non-trivial approaches. At the same time, it is necessary to take into account objective reasons leading to low innovative potential. The main factor restraining innovation in the cluster of small and medium-sized enterprises is its relatively small size, which does not allow forming a «critical mass» of competences for innovative growth. Even the pooling of resources of 50-100 small

⁴ Compiled by: Strategy for the Development of the Information Technologies Cluster in the Novgorod Region. URL: <http://ckr53.ru/news/Стратегия%20развития%20Кластера%20информационных%20технологий.pdf>.

enterprises may not be sufficient to create and develop their own innovative institutions, the research and development sector. The internal labor market and competencies in such a cluster are also too small to get internal innovative impulses. Certain elements of the innovation system that can be formed in a cluster of small and medium-sized enterprises (for example, an exhibition site or training) do not have the expected impact precisely because there is no complete innovation system.

Common to almost any cluster, the reason for restraining innovation potential is the lack of a mechanism for transferring innovations and the weak development of the innovation market. Practically any modern cluster in Russia includes research organizations, educational organizations of higher and secondary education, small innovative enterprises, but the gap between science and production remains very large. The membership of universities and institutes in clusters has very little effect on the overall innovation potential. In clusters of small and medium-sized enterprises, this problem is further exacerbated, since it is quite difficult for a large university or institution to build interaction with a wide range of small and medium-sized enterprises.

The problem of developing the innovative potential of clusters of small and medium-sized enterprises is extremely complex and requires detailed analysis. In the author's opinion, the positive effects of regional clusters can be innovative in forming rational interaction with a mature regional innovation system. In the preliminary plan, we can talk about two directions for developing the innovative potential of clusters of small and medium-sized enterprises in the regional innovation system.

1. Formation of specific types and ways of integrating clusters of small and medium-sized enterprises with the research and development sector, educational organizations, as well as development institutions and public organizations. It is necessary to search for special forms of organization of joint work, proceeding from specific interests, needs and opportunities. Interesting in this respect is the position of many basic universities that focus on adaptation and transfer to small, medium-sized businesses of known advanced technologies, plan training and retraining of specialists in technological entrepreneurship who are able to solve the corresponding problems at the level of small and medium-sized enterprises.

2. Specific support of innovation activity, focused on clusters of small and medium-sized enterprises. Such types of support should take into account the state of the innovation potential of the cluster, eliminate bottlenecks, and also focus more on the entire value chain, rather than individual enterprises.

The development of the innovative potential of clusters of small and medium-sized enterprises will expand the range of strategic tasks that they solve, and will contribute to a more balanced development of the territories.

References

1. Turgel', I.D. & Vlasova, N.Ju. (2016). *Territorial'noe planirovanie razvitiya gorodov v RF: osnovnye jetapy formirovaniya* [Territorial planning of urban development in the Russian Federation: the main stages of formation]. *Municipalitet: jekonomika i upravlenie* [Municipality: Economics and Management], 1, 5–15.
2. Dvorjadkina, E.B. (2016). *Novaja industrializacija i mestnoe samoupravlenie* [New industrialization and local self-government] *Novaja industrializacija: mirovoe, nacional'noe, regional'noe izmerenie: Materialy mezhdunarodnoj nauchno-prakticheskoj konferencii* [New industrialization: global, national, regional dimension: Materials of the international scientific and practical conference]. Ekaterinburg: Publishing house of the Ural State Economic University, 100–103.
3. Yoshino, Y. (2011). *Industrial clusters and micro and small enterprises in Africa: From survival to growth*. Directions in development. World Bank. <https://openknowledge.worldbank.org/handle/10986/2546>.
4. Tambunan, T. (2005). Promoting small and medium enterprises with a clustering approach: A policy experience from Indonesia. *Journal of Small Business Management*, 43: 2, 138–154.
5. Tambunan, T. (2009). Export-oriented small and medium industry clusters in Indonesia. *Journal of Enterprising Communities: People and Places in the Global Economy*. 3:1, 25–58.
6. Navickas, V & Malakauskaite, A. (2009). The impact of clusterization on the development of small and medium-sized enterprise (SME) sector. *Journal of Business Economics and Management*, 10:3, 255–259.
7. Ogechukwu, A.D. & Oboreh, J.S. & Umukoro F. (2013). Small and medium scale enterprises in Nigeria the marketing interface. *Global Journal of Management and Business Research Marketing*. 13:9, 1–12.
8. Medvedeva, S.A. (2010). *Innovacionnyj potencial predpriyatija: slozhnost' opredelenija i osnovnye osobennosti* [The innovative potential of the enterprise: the complexity of the definition and the main features]. *Kreativnaja jekonomika* [Creative economics], 10, 35–39.
9. Sosunova, L.A. & Markova, O.V. (2014). *Koncepcija upravljenja innovacionnym potencialom mezojekonomicheskoj sistemy*

[The concept of managing the innovative potential of the mesoeconomic system]. *Vestnik Samarskogo gosudarstvennogo jekonomicheskogo universiteta* [Bulletin of the Samara State University of Economics], 9, 96–101.

10. Babkin, A.V. & Moshkov, A.A. (2013). *Upravlenie innovacionnym potencialom integrirovannyh promyshlennyh struktur* [Management of innovative potential of integrated industrial structures]. *Izvestija Sankt-Peterburgskogo gosudarstvennogo jekonomicheskogo universiteta* [Proceedings of the St. Petersburg State University of Economics], 6, 45–53.

11. Antipin, I.A. (2017). *Regional'nye klasteri malyh i srednih predpriyatij Rossijskoj Federacii: osobennosti formirovaniya i tendencii razvitiya* [Regional clusters of small and medium-sized enterprises of the Russian Federation: features of formation and development trends]. *Jekonomika i predprinimatel'stvo* [Economics and Entrepreneurship], 1, 266–271.

12. Ratner, S.V. & Akinina, M.M. (2011). *Metodika ocenki innovacionnogo potenciala kompanij regional'nogo neftegazovogo klastera (na primere Krasnojarskogo kraja)* [Methodology for assessing the innovative potential of companies in the regional oil and gas cluster (based on the example of the Krasnoyarsk Territory)] *Jekonomicheskij analiz: teorija i praktika* [Economic Analysis: Theory and Practice], 4, 2–9.

13. Maticiuc, M. (2015). The complex relation between clusters and innovation in European Union. *Ecoforum*, 4:2, 99–103.

14. Dhakal, S.P. (2013). The innovation potential of living-labs to strengthen small and medium enterprises in regional Australia. *Australasian Journal of Regional Studies*. 19:3, 457–474.

15. Ausloos, M. (2017) Exploring how innovation strategies at time of crisis influence performance: a cluster analysis perspective. *Technology Analysis & Strategic Management*, 26:1, 1–14.

16. Animica, E.G. & Vlasova N.Ju. (2010). *Chelovecheskij faktor v razvitii krupnejshih gorodov* [Human factor in the development of major cities]. *Upravlenec* [Manager], 7-8, 13–16.

17. Silin, Ja.P. & Animica, E.G. & Novikova N.V. (2016) «Novaja normal'nost'» v rossijskoj jekonomike: regional'naja specifika [«New Normality» in the Russian Economy: Regional Specificity]. *Jekonomika regiona* [Economy of the region], 12:3, 714–725.

18. Surnina, N.M. & Shishkina, E.A. (2013). *Razvitie metodologii regional'nogo strategicheskogo planirovaniya: povyschenie soglasovannosti i rezul'tativnosti* [Development of a methodology for regional strategic planning: increasing coherence and effectiveness]. *Upravlenec* [Manager], 1, 56–63.

Author

Korchagina Irina Vasil'evna – Senior Lecturer, Department of Economic Theory, Taxation, Business and Law, Kemerovo State University (6, Krasnaja St., Kemerovo, 650043, Russia; e-mail: korchagina-i@mail.ru)